

Docket No. YAMAP0718USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: Odagawa et al.  
Serial No.: Not yet assigned  
Filed: December 28, 2001  
For: MAGNETO-RESISTANCE EFFECT ELEMENT, MAGNETO-RESISTANCE EFFECT MEMORY CELL, MRAM, AND METHOD FOR PERFORMING INFORMATION WRITE TO OR READ FROM THE MAGNETO-RESISTANCE EFFECT MEMORY CELL  
Art Unit: Not yet known  
Examiner: Not yet known



3-4-02

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: 09/596,116  
Filing Date: 06/16/00

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) ☐ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
  - (b) ☐ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".
3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):
- (a) ☒ Within 3 months of the filing date or date of entry into the National Stage.
  - (b) ☐ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.
  - (c) ☐ Before the mailing date of a first Office Action on the merits after a first or second submission under 37

C.F.R. 1.129(a).

(d) \_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988

(e) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 18-0988.

4. Certification (if applicable)

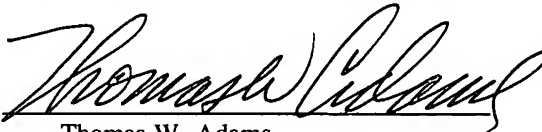
(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 18-0988.

Respectfully Submitted,

RENNER, OTTO, BOISSELLE & SKLAR, P.L.L.

By 

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12/28/01  
10/034895  
JC978 U.S. PRO

Form PTO-1449 (Modified)  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	Atty Docket No. <b>YAMAP0718USA</b>	Serial No. <b>Not yet assigned</b>
	Applicant: <b>Odagawa et al.</b>	
	Filing Date <b>December 28, 2001</b>	Group <b>Not yet known</b>

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Filing Date if Appropriate
	5,686,838	11/11/97	van den Berg	324	252	

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Sub-class	Translation	
						Yes	No

**OTHER ART**

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	European Search Report, Application No. EP 00 11 2886, dated March 5, 2001.
	Patent Abstracts of Japan; Vol. 1995, no. 04, 31 May 1995 & JP 07 014710 A (Fujitsu Ltd.), 17 January 1995 abstract.
	Sakakima et al.; "Magnetoresistance in CoMdB/Co(Fe)/Cu/Co(Fe) spin-valves"; Journal of Magnetism and Magnetic Materials; Vol. 165, no. 1/03, 1997; pages 108-110.
	Lu et al.; "Bias voltage and temperature dependence of magnetotunneling effect"; 1998 American Institute of Physics; 1 June 1998; pgs. 6515-6517/

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**Information Disclosure Statement PTO-1449 (Modified)**

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution.

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	Filing Date <b>12/28/01</b>	Group <b>Not yet known</b>



**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Sub-class	Appropriate

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Sub-class	Translation	
						Yes	No
	0 910 092	21/04/99	EP				
	1 003 176	24/05/00	EP				X
	0 681 338	08/11/95	EP				

**OTHER ART**

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	European Search Report, Application Number EP 00 11 2886, dated 10/08/01

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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Applicant: Odagawa et al.		
Filing Date: 12/28/01		Group: Not yet known

**REFERENCE DESIGNATION U.S. PATENT DOCUMENTS**

Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	5 6 4 0 3 4 3	06/17/97	Gallagher et al.	365	171	
	AB	5 6 5 0 9 5 8	07/22/97	Gallagher et al.	365	173	
	AC	5 7 3 4 6 0 5	03/31/98	Zhu et al.	365	173	
	AD	5 7 9 3 6 9 7	08/11/98	Scheuerlein	365	230.07	
	AE	5 8 0 1 9 8 4	09/01/98	Parkin	365	158	
	AF	5 8 3 8 6 0 8	11/17/98	Zhu et al.	365	158	
	AG	5 8 4 1 6 9 2	11/24/98	Gallagher et al.	365	173	
	AH						

**FOREIGN PATENT DOCUMENTS**

Examiner's Initials		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AI							
	AJ							
	AK							
	AL							
	AM							

**OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)**

	AN	
	AO	
	AP	

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